EXP237
XMC Expansion Card for VME Systems

Features

- Provides three additional XMC/PMC expansion sites via PCI Express (PCIe) to the Host Processor through on-board connector
  - One 133 MHz
  - Two 100 MHz
- VITA 42.3 compliant
- Integrated ATI Radeon E2400 Graphics Processing Unit delivering 2D, 3D, and multimedia graphics performance to embedded systems
- Expansion sites configured as:
  - Three 3.3V/5.0V PMC sites
  - Three XMC sites
- Optional x8 PCIe Video Port with two XMC/PMC expansion sites:
  - Two 133 MHz

The EXP237 is a 6U VMEbus form factor expansion card offering three additional XMC/PMC expansion sites via an on-board connector designed to be compatible with many VMEbus single board computers from GE Intelligent Platforms.

A unique feature of this expansion card is the option to include the ATI Radeon E2400 Graphics Processing Unit in place of one of the XMC/PMC sites providing 2D, 3D, and multimedia graphics performance for embedded systems.

Features of the Graphics Processing Unit:

- 64-bit interface to 128 MByte GDDR3 memory
- Native PCI Express x16 bus interface with flexibility to operate in x16 and x8 modes
- Dual Analog/Digital video interface

Simple Connection to the Host

Connection to the host is via PCI Express through on-board connectors. The PCIe connection can be either x16 or x8 depending upon the host SBC.

Please contact GE for further information.

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Specifications

Components
- PCIe Switch: PEX8648
- Optional ATI Radeon E2400 Graphics Processing Unit

Board-to-Board Connector
- Either x16 or x8 PCIe based on Host Processor Board
- Power and reset signals

Board Configurations
- 3x XMC/PMC sites
  - 1x 133 MHz
  - 2x 100 MHz
- 2x XMC/PMC sites + two DVI/VGA and 1x composite video
  - 2x 133 MHz
  - 1x USB with the V7875

MTBF
- Contact Factory

Dimensions
- 6U (4HP) single slot Eurocard form factor
- Height: 9.2 in. (233.4mm)
- Depth: 6.3 in. (160mm)
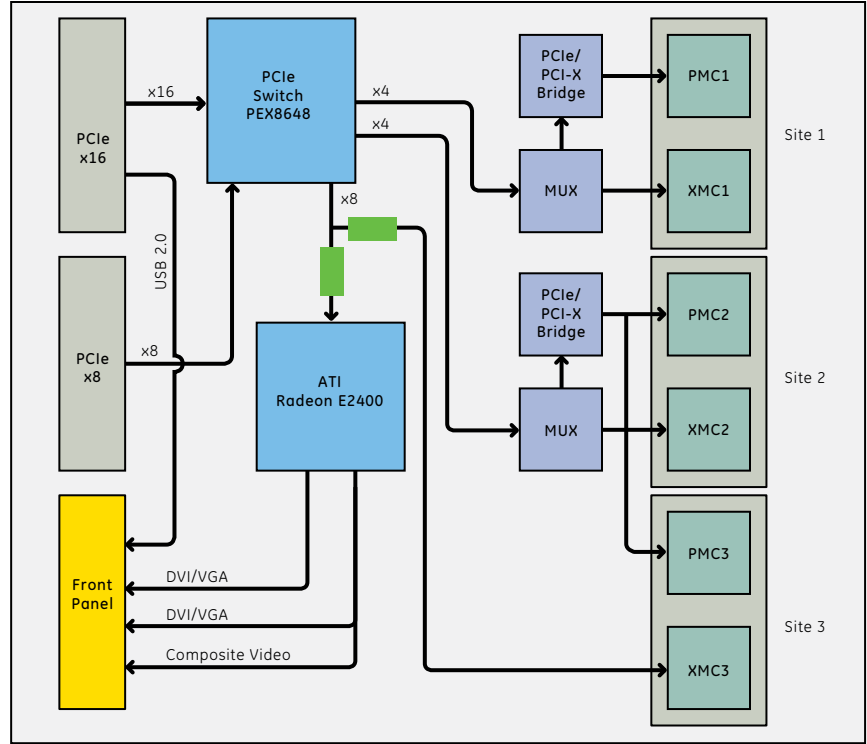- Thickness: 0.8 in. (20.3mm)

Power Requirements
- +5 VDC (±5 percent), 3 A (typical), 4 A (maximum)
- +12 VDC (±5 percent), 0 mA
- -12 VDC (±5 percent, 0 mA
Note: Does not include PMC site for power requirements

Environmental

	Level 1
Cooling Method	Convection
Conformal Coating	Optional
High/Low Temperature	0° to 55° C
Storage Temperature	-50° to 100° C
Shock	20 g shock
Random Vibration	• 5 Hz to 100 Hz PSD increasing at 3 dB/octave • 100 Hz to 1000 Hz PSD = 0.04g2/Hz • 1000 Hz to 2000 Hz PSD decreasing at 6 dB/octave
Humidity	Operating: relative humidity 5% to 95%, noncondensing Storage: relative humidity 5% to 95%, noncondensing
Altitude	Operating: 0 – 10,000 ft (3,000m) Storage: 0 – 40,000 ft (12,000m)

Block Diagram

Ordering Information

EXP237-100000 Three PMC/XMC sites, connects to host boards with x16 connectors

EXP237-200000 DVI/VGA video and composite video. connects to host boards with x16 connectors

EXP237-300000 Three PMC/XMC sites, connects to host boards with x8 connectors

EXP237-400000 DVI/VGA video and composite video, connects to host boards with x8 connectors

About GE Intelligent Platforms

GE Intelligent Platforms, a General Electric Company (NYSE: GE), is an experienced high-performance technology company and a global provider of hardware, software, services, and expertise in automation and embedded computing. We offer a unique foundation of agile, advanced and ultra-reliable technology that provides customers a sustainable advantage in the industries they serve, including energy, water, consumer packaged goods, government and defense, and telecommunications. GE Intelligent Platforms is a worldwide company headquartered in Charlottesville, VA and is part of GE Home and Business Solutions. For more information, visit defense.ge-ip.com.

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